CHILDREN SUBJECTIVE WELL-BEING IN RICH COUNTRIES

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Abstract. This paper is based on background research we undertook for UNICEF Innocenti Report Card 11 on child well-being in rich countries. It develops a new domain index of subjective well-being based on seven indicators drawn from the Health Behaviour of School Aged Children (HBSC) survey 2009/10, which includes life satisfaction, relationships with family and friends, well-being at school, and subjective health. It explores the associations between the indicators, components and the overall domain. Changes in subjective well-being between HBSC 2001/2 and 2009/10 are analysed. It then explores the relationships between subjective well-being and objective domains: material, health, education, behaviour and housing and environment. At a macro level subjective well-being is associated with all those domains. It then analyses the relationship between subjective well-being and structural indicators. It concludes that subjective well-being should be included in comparative studies of well-being but not necessarily as just another domain. It is a related but different order measure.

Keywords: Well-being, subjective well-being, comparative of rich countries

1. Introduction

Child well-being can be assessed using objective indicators of the kind employed to derive the domains of material, health, education, behaviour and housing in RC11. It can also be assessed by asking children what they think and feel about their lives. In RC7 and the other associated international comparisons of child well-being, subjective well-being was treated as just another domain (and given equal weight) (Bradshaw, et al, 2007). However for the reasons argued in this paper, in RC11 subjective well-being is treated as a separate domain. It is a different order of well-being, even perhaps partly a product of the other domains.

The paper is structured in the following way: Section 2 illustrates the theoretical background of our analysis; Section 3 discusses about the results of our analysis; Section 4 tries to investigate about the factors explaining children subjective well-being. Finally, Section 5 concludes.

2. Background

Happiness has been receiving more attention recently. The observation of the paradox that getting richer does not lead to greater happiness (after a certain level) resulted in the initiative by President Sarkozy of France to set up the Stiglitz Commission (see Stiglitz, et al 2009). In its report in 2009 the Commission urged countries (and the OECD) to collect data on subjective well-being. The OECD began to publish the *How's Life* index[1] and a number of countries have begun to collect data on subjective well-being – for example the UK government has asked the Office of National Statistics to incorporate questions on happiness for both adults and children in national surveys.

The United Nations Convention on the Rights of the Child enjoins us, indeed requires governments, to listen to children and take their views into account. It does not say how governments should do this, but asking children what they think and feel seems an obvious way of attempting to take their views into account (Redmond, 2011; 2012).

Subjective well-being is a measure of well-being now. It may be argued that too many indicators in the objective domains (most obviously educational attainment and participation) are about well-becoming rather than well-being. If childhood is to be valued as a life stage in its own right then indicators of current well-being are needed.

Subjective well-being may well be associated with well-becoming though there appears to be very little evidence on the subject [2].

Most parents are surely concerned that their children are happy. If they are then policy makers and the media should be. In the analysis below we find an association between subjective well-being and all of the objective domains of well-being. That is countries where material, health, education, behavior, housing is better tend to have happier children. This finding indicates that policy has a part to play in making children happier.

At a micro individual level there is also evidence that children are happier if they live in decent houses, in safe neighbourhoods, are not bullied, enjoy and achieve in schools and are not materially deprived (The Children's Society, 2012). Relationships with their family and friends may matter more than these things and making relationships better may not be directly amenable to policy. But indirectly they can be - by for example: reducing the burdens of poverty and inequality on parents, treating parental depression, and providing family friendly services.

However, subjective indicators based on individuals' self-reports of aspects of life should be interpreted and compared across countries with caution as they are influenced by personality

[1] http://www.oecd.org/statistics/howslifemeasuringwell-being.htm

[2] Keung (2007) used the British Household Panel to relate employment and educational outcomes at 20-24 to variation in subjective well-being when the cohort members were 11-15. Her results proved largely negative.

traits as well as cultural factors (Diener *et al*., 2003). If subjective well-being is related to personality then it might be argued that personality is formed by nature and nurture, and nature and nurture cannot really be influenced by public policy.

Some may believe that subjective measures are (well) subjective – that asking children structured questions in sample surveys about what they think and feel is somehow less valid or reliable than asking the children questions in the same survey about whether they smoke or drink alcohol. Some may think that subjective well-being is a transient mood and therefore not reliable. Alternatively they may argue that it is culturally determined - that children in, for example, France have a different understanding of 'satisfied with life' than they do in, say, Korea. Alternatively it may be argued that the real meanings are 'lost in translation', for example 'the best possible life for you' may mean different things in Japanese to what it means in Italian.

There is also evidence that expressions of subjective well-being may be a function of false expectations or adaptive preferences. Very deprived children may say that they are very satisfied with life because they know no better, or they have become reconciled to their lot. There is certainly some evidence in poverty studies of poor children not complaining to their parents in order to protect them from guilt (Ridge, 2002). An example of false expectations in the other direction would be a girl being dissatisfied with her body or her clothing because she does not look like models she sees in the media.

Finally there is the argument of Cummins (2010) that happiness is the result of genetically determined homeostatic adaptation. Over the millennia the humans who have survived most successfully have been those who have had more capacity to adapt to their environment and the shocks of life. Humans, including children, have a natural resilience to bounce back to a predetermined happy state. This may explain why it is hard to explain variations in subjective well-being in terms social structural characteristics or life events - because people have all bounced back. However the empirical evidence is that not everyone has bounced back to the same level. There is a tail of low subjective well-being and also international variation. What explains it?

3. The concept and the analysis of subjective well-being

There is a vast and complex literature on the concept of subjective well-being. Drawing on this literature the Stiglitz Commission suggested that a distinction should be is made between

- An evaluative element - life satisfaction or happiness
- An experiential element–
    - Positive affect (joy/pride) and
    - Negative affect (pain/worry)
- Eudemonic well-being – worthwhileness, or achieving rewards in life independent of pleasure

Ideally we would want to take account of all these elements but more or less the only source of subjective well-being measures at international level is the Health Behaviour of School Children Survey (HBSC)[3].

[3] For more information see Currie *et al*. (2012).

For RC 11 we have used HBSC to create an index of subjective well-being which encompasses four components - namely life satisfaction, relationships, subjective education and subjective health. These are derived from eight indicators summarised in Table 1. Each indicator z score contributes equally to the component score and the subjective well-being score is an average of the z scores of the four components.
All the data refer to young people aged 11, 13 and 15 and are extracted from the HBSC 2009/2010 report. All countries included in our analysis are covered with the exception of Australia, Bulgaria, Cyprus, Japan, Malta and New Zealand, because they are not in the HBSC.

Table 1: Subjective well-being:

Component	**Indicator**	**Definition**
Life Satisfaction	Life Satisfaction	Young people with scores above the middle of the life satisfaction scale, aged 11, 13 and 15
Relationships	Easy to talk to mothers	% 11,13,15 year olds who find it easy to talk to mothers
	Easy to talk to fathers	% 11,13,15 year olds who find it easy to talk to fathers
	Classmate are kind and helpful	% 11,13,15 finding their classmate are kind and helpful
Subjective education	Pressured by school work	% 11, 13 15 who feel pressured by school work
	Young people liking school a lot	Young people liking school a lot aged 11, 13, 15
Subjective health	Health fair or poor	Percentage of young people age 11, 13 and 15 who rate their health as fair or poor.
	Health complaints	Prevalence of self-reported health complaints

3.1 The results

In the following sections, we present the main results for the different components. While for the "Life Satisfaction" component the results are summarized by a figure, for the remaining components data are presented via tables. As in the Background Paper n.1, different colours are used to code the countries according to their ranking for each single indicator: "light blue indicates the best performing group, mid-blue the intermediate performers, while dark blue marks the worst performing group. In the intermediate group, there are countries performing around the average while in the best or the worst groups are countries performing respectively half standard deviation above or below the average. Finally, each table is ordered according to their ranking in the whole component" (Background Paper n 1;…).

i) Life satisfaction. An important component of subjective well-being is life satisfaction. Life satisfaction correlates with a number of positive outcomes both in the short and in the long-term. In particular, it is related to coping ability and social competence that brings to more positive outcomes in adulthood (Currie *et al*., 2012); it plays a role in preventing psychopathology during childhood and adolescence (Huebner et al, 2004).

HBSC uses Cantril's ladder to measure life satisfaction. Children are asked to place themselves on a ladder where 0 is the bottom of the ladder indicating the worst possible life for you and 10 is the top of the ladder indicating the best possible life for you. Table 2 gives the proportion of children scoring above the mid-point (6 or more) for all countries included in the 2010 HBSC. It can be seen that the majority are happy, but happiness declines with age for girls and at 15 girls are less happy than boys.

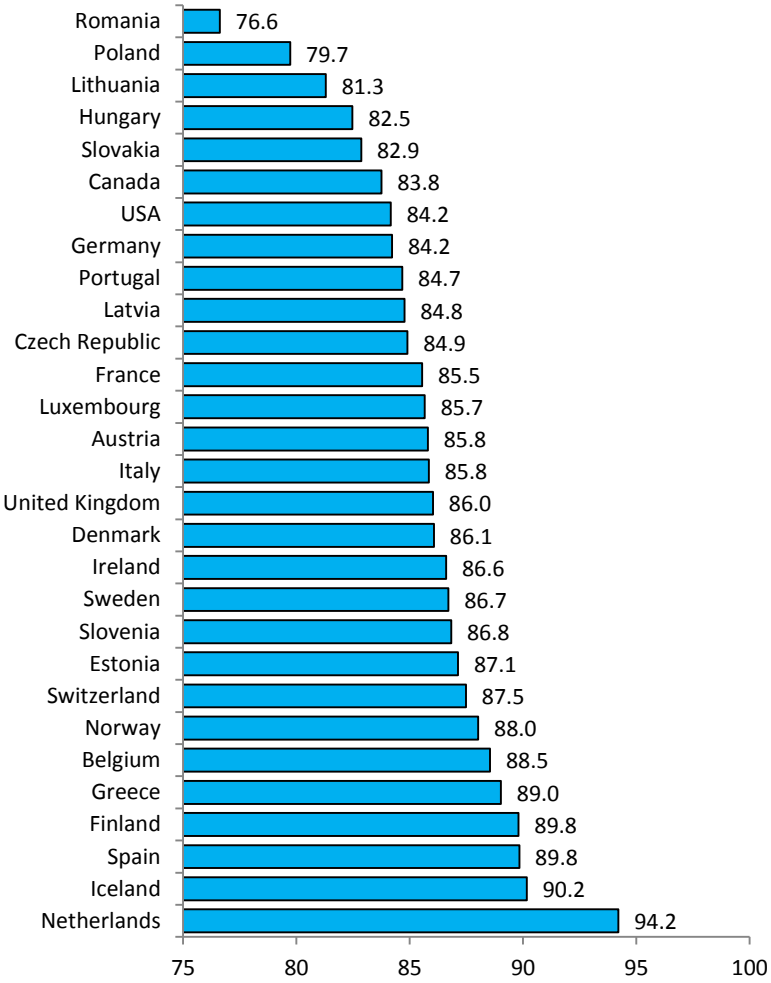
Table 2: Percentage with high life satisfaction by age and gender HBSC 2010

	Aged 11	Aged 13	Aged 15
Girls	88	83	79
Boys	88	87	86
Total	88	85	83

Source: Currie et al 2012

Figure 1 shows the differences across countries. Only in Iceland and the Netherlands is the percentage of young people with scores above the middle of the life satisfaction higher than 90 per cent. On the other hand, the lowest positions are occupied by Central and Eastern European countries - Slovakia, Hungary, Lithuania, Poland and Romania.

Figure 1: Percentage of young people with scores above the middle of the life satisfaction scale, aged 11, 13 and 15



Source: Authors' calculations based on HBSC 2009/2010

ii) Peer and family relationships. An important aspect of subjective well-being is to do with a child's relationships inside and outside the family. Family relationships were found to be the single most important contributor to children's subjective well-being in the Children Society Surveys (The Children's Society, 2012). Beyond the family, the most important environment for children is the school and relationships with classmates are a very important determinant of happiness. Friendships can provide a supportive environment in which develop self-esteem and the ability to carry out social interactions, as well as helping to form their own identity (Currie et al, 2012).

The relationship component is therefore based on three indicators: the percentage of young people who find it easy to talk to their mother, the percentage of young people who find it easy to talk to their father and the percentage of young people that find their classmate kind and helpful.

Table 3 summarizes the main results regarding children relationships. In terms of family relationships, as might be expected, the country composition of the groups is quite stable across the two indicators: countries where children find it easy to talk to their mother are also those where children find it easier to talk to their father; there are however some exceptions in the intermediate and in the worst performing groups. Thus, it is interesting to observe that among the best performers are not only the Nordic countries but also Estonia, Hungary, Romania and Spain. In contrast, children report more problematic communication inside families in Belgium, France, Italy, Slovakia and the USA.

There is no association between finding friends kind and helpful and ease in talking to mothers and fathers, despite the fact that four countries are again in the best performing group. This suggests that in the Netherlands, Iceland, Sweden and Denmark children find it easier to establish relationships inside and outside the family than in other countries. On the other hand, in France and the USA children find it more difficult to talk with their parents and to interact with their classmates.

It is also interesting to observe that there is no extreme re-ranking with the exception of three countries. In Hungary and Poland, a high percentage of young people find it easy to talk to their parents but only a small percentage of them find their classmate kind and helpful. In contrast, in Belgium, a high percentage of young people consider their classmate kind and helpful but find it difficult to communicate with their parents.

Table 3: Children relationships

	easy to talk to mothers	easy to talk to fathers	classmate are kind and helpful
Netherlands	91.7	81.5	80.4
Iceland	89.3	79.8	80.3
Sweden	85.5	72.4	82
Slovenia			76.8
Romania	90.4	74.8	64.8
Hungary	89.9	76.4	58.1
Denmark	84.2	69.5	77.2
Finland	86.6	72.5	66.1
Spain	86.5	70.8	67.1
Estonia	86.1	69.1	65.1
Ireland	82.9	68.1	73.4
Germany	81.5	64.5	77.9
Poland	86.6	72.6	51
Portugal	81.3	61.2	79.4
Norway	78.7	65.1	78.2
United Kingdom	83	68.6	63.3
Switzerland	79.7	62	78.9
Austria	82.2	64.9	69
Luxembourg	79.5	62.7	73.5
Italy	79.7	59.9	68.5
Latvia	82	65.8	54.5
Belgium	77.5	57.3	75
Czech Republic	81.4	62.8	56.1
Lithuania	80.4	62.1	58
Slovakia	78.7	61.3	61.7
Canada	79.4	62.6	58.2
Greece	83.1	64.2	44.3
USA	73.9	59.7	56.2
France	71.2	50.3	56.6

Source: Authors' calculations based on HBSC 2009/2010

iii) Subjective education. The subjective education component is made up of two indicators: the percentage of young people pressured by school work and the percentage of young people liking school a lot. Table 4 summarizes the main results regarding the subjective education. In the Netherlands, Hungary, Austria and France children are least pressured by school work and are also in the best performing group in liking school a lot. Contrast this with Finland which has one of the highest proportions of young people feeling pressured by school work and one of the lowest proportions liking school a lot. Overall there is no association between these indicators. For example Slovakia is in the best performing group for pressured by

school work, but the worst group for liking school a lot. Iceland and Lithuania are the opposite.

Table 4. Subjective educational well – being

	pressured by school work	Young people liking school a lot
Netherlands	16.8	38.4
Austria	20	33.7
Hungary	18.4	31.5
France	20.8	32.4
Romania	32	41.6
Latvia	22.3	32.6
Germany	23.9	33.3
Norway	32.6	38.8
Iceland	43.5	42.5
Slovakia	19.1	21.3
Sweden	23.4	23.2
Belgium	26.7	25.4
Lithuania	44.4	39
Poland	21.8	20.2
Denmark	30.4	27.2
Switzerland	24.7	20.6
Luxembourg	26.8	20.2
USA	40.6	30.7
Ireland	36.9	23.9
United Kingdom	42.1	27.6
Canada	41.2	26.7
Czech Republic	32.6	17.3
Slovenia	48.9	27.4
Greece	40.3	19.3
Spain	49.4	26
Portugal	47.2	23.1
Italy	41.1	14.8
Estonia	34.6	9.2
Finland	44.6	15.3

Source: Authors' calculations based on HBSC 2009/2010

iii) Subjective health. Table 5 summarizes the results regarding the perceived health status component which is also based on two indicators: the percentage of young people that report their health as fair or poor and those with self-report health complaints. The former indicator is a conventional self- reported health indicator but the latter indicator may be treated as an indicator of mental health in that it is based on the answers to seven questions about

psychosomatic symptoms similar to the SDQ[4]. There is no association between these two indicators. Only Slovenia and Portugal and in the best performing group on both and only Poland and the USAs are in the worst performing group on both. Italy is fourth best on rating health as fair or poor but the worst country of all in self reported health complaints.

Table 5. Subjective health

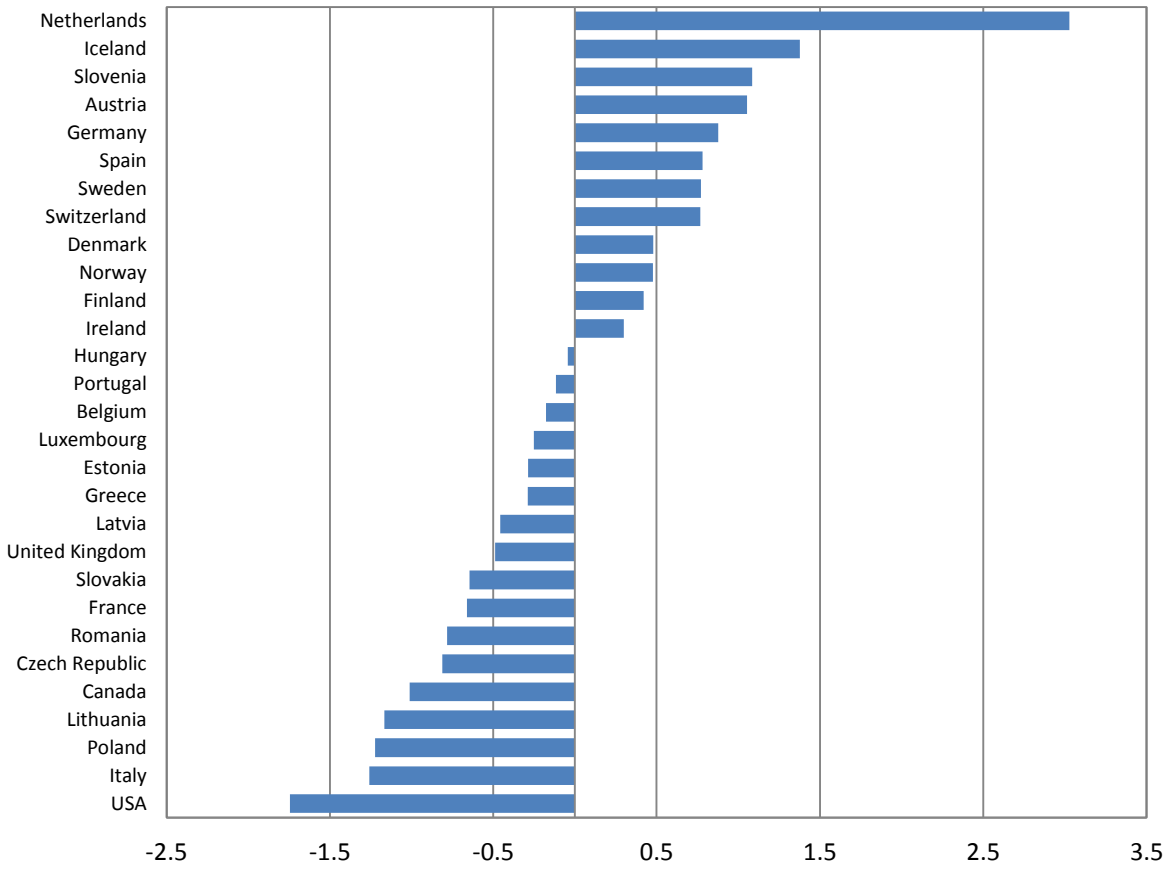
	rating health as fair or poor	self reported health complaints
Slovenia	10.2	16.8
Switzerland	7.7	28
Germany	12.6	20.7
Portugal	11.6	22.6
Spain	6.8	30.7
Austria	12.5	21.3
Finland	12.4	24.8
Ireland	11.5	28.5
Netherlands	13.6	25.4
Greece	6.5	38.2
Denmark	16.6	24.1
Estonia	13.6	30
Sweden	13.5	30.3
Czech Republic	10.1	37.8
Luxembourg	14.3	30.8
Slovakia	11.3	36.7
France	11.6	36.8
Canada	15.1	31.5
Iceland	15.7	31.3
Norway	17.1	29.1
United Kingdom	17	31.2
Belgium	19.3	28.5
Lithuania	14.7	36.2
Italy	9.1	46.4
Hungary	20.1	31.5
Latvia	19.1	33.3
Poland	17.8	36
Romania	15.5	40.7
USA	21.4	34.6

Source: Authors' calculations based on HBSC 2009/2010

[4] Young people were asked how often they had experienced the following symptoms in the last six months: headache; stomach ache; feeling low, irritable or bad tempered; feeling nervous; difficulties in getting to sleep; and feeling dizzy. Response options for each symptom ranged from "about every day" to "rarely or never". The findings presented show the proportions who reported multiple (two or more) health complaints more than once a week in the past six months.

Figure 2 shows results for to the overall subjective well-being dimension - that is after combining the indicators into components and the components in the domain. The Netherlands is a clear outlier on subjective well-being, performing much better than the other countries. Only Iceland among the Nordic European countries is in the top positions. Spain performs well as a result of its good results on life satisfaction, relationships and perceived health status. The worst performing country overall is the USA.

Figure 2: Subjective well-being in rich nations



Source: Authors' calculations based on EU SILC 2009

The association between the subjective well-being indicators is explored in Table 3. Three of the four components are associated with overall subjective well-being. The exception is subjective education where neither liking school a lot or pressured by school work are associated with overall subjective well-being. The strongest association with overall subjective well-being is self-reported health complaints and class mates kind and helpful. Among the components, life satisfaction is not associated with relationships or subjective education. Relationships and subjective education are not associated with the other component. Subjective health is only associated with life satisfaction.

Table 6: Correlation matrix of subjective well-being indicators, components and domains (z scores spearman rank)

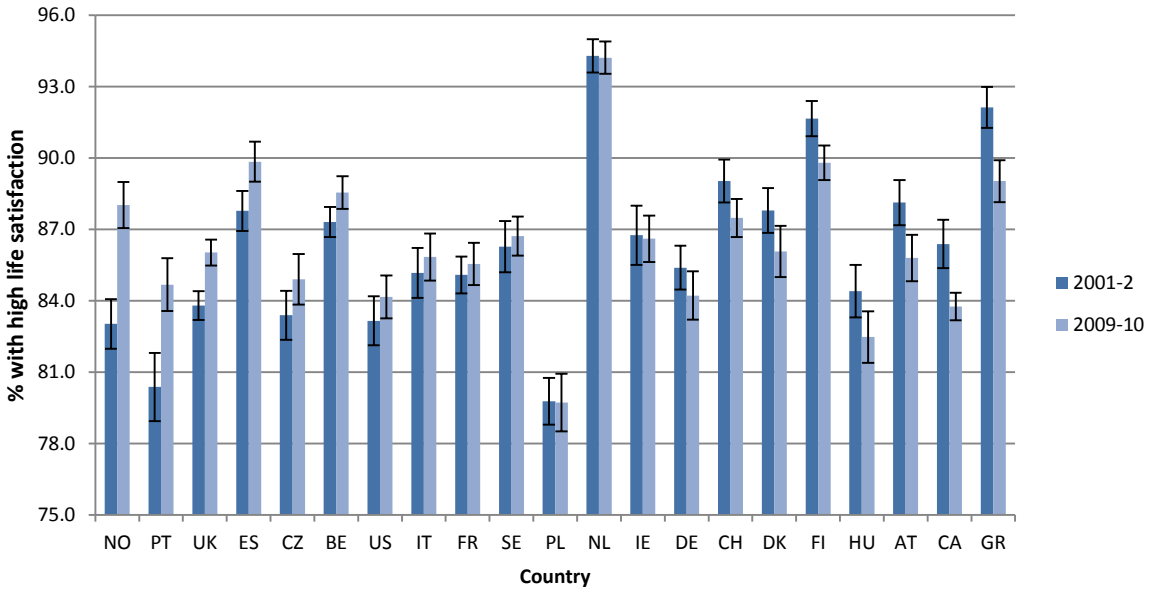
	Life satisfaction	easy to talk to mothers	easy to talk to fathers	classmates kind and helpful	pressured by school	like school a lot	Health fair or poor	Self-reported health	Relation.	Subjective education	Subjective health	Subjective domain
Life satisfaction	1.000	.229	.240	.509**	-.234	-.133	.295	.416*	.350	-.228	.487**	.646**
Easy to talk to mothers		1.000	.931**	.118	-.002	.085	-.039	.135	.798**	.051	.117	.393*
easy to talk to fathers			1.000	.189	.066	.224	-.219	.189	.842**	.185	.031	.452*
classmates kind and helpful				1.000	-.035	.160	.102	.699**	.607**	.109	.511**	.755**
pressured by school					1.000	.144	-.239	-.047	-.034	.756**	-.164	.066
like school a lot						1.000	-.466*	.092	.193	.737**	-.232	.266
Health fair or poor							1.000	.028	-.075	-.437*	.691**	.184
Self-reported health								1.000	.491**	-.007	.705**	.778**
Relationships									1.000	.111	.283	.669**
Subjective education										1.000	-.275	.228
Subjective health											1.000	.692**
Subjective domain												1.000

3.2. Changes in subjective the well-being dimension during the last decade

It is possible to study changes subjective well-being over the last decade using HBSC data for 2001/2002 and 2009/10.

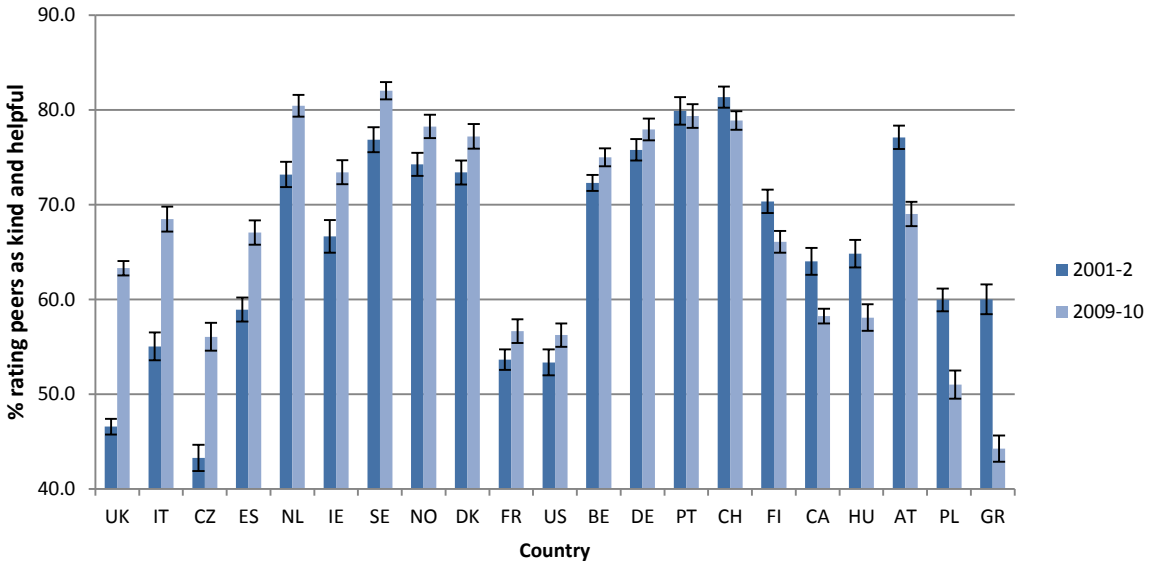
i) Life satisfaction. Figure 3 shows two different trends. In half of the countries the percentage of children satisfied with their lives increased. Norway is the country which recorded the biggest improvement. The proportion with high life satisfaction also improved significantly in Portugal, the UK and Spain. In the remaining countries, there was either not significant change or a reduction in the percentage of young people with high life satisfaction, with Greek children experiencing the biggest decline. The Netherlands was clearly an outlier with the percentage of young people with scores above the middle of the life satisfaction close to 95 per cent in both the early and the late 2000s.

Figure 3: Percentage of young people age 11, 13 and 15 who rated their life satisfaction with a score of 6 or more on the 11 steps "Cantril Ladder" scale between 2001/2002 and 2009/2010.



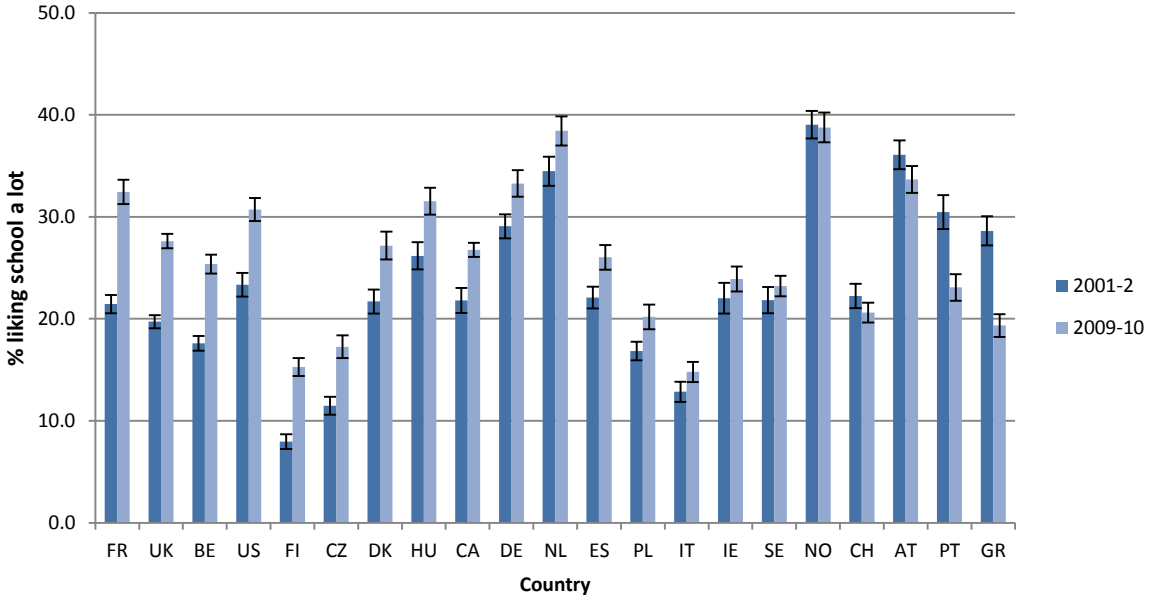
ii) Classmates kind and helpful. To represent children's relationships we have used only one indicator: the percentage of young people that find their classmate kind and helpful. In the majority of countries the percentage of children which consider their classmate kind and helpful increased over the last decade. The biggest improvements were in the UK, Italy and the Czech Republic even though all these countries started from a low percentage in 2001/2002. In contrast, Austria, Poland and Greece recorded the largest negative changes (Figure 4).

Figure 4: Percentage of young people that find their classmate kind and helpful in 2001/2002 and 2009/2010



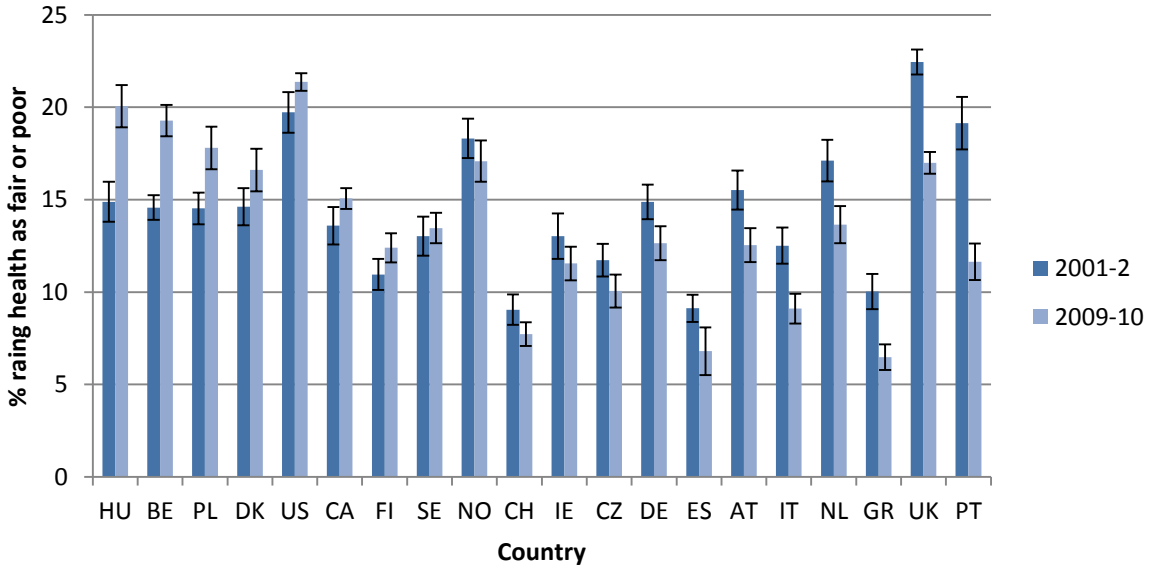
iii) Liking school a lot. Figure 5 shows changes in the percentage of young people liking school a lot in the last decade. In particular, improvements were evident in France, UK, Belgium, the United States and Finland. In contrast it decreased in Portugal and Greece.

Figure 5: Changes in the percentage of young people who report liking school a lot between 2001/2002 and 2009/2010



iv) Health fair or poor. Figure 6 shows changes in the percentage of children reporting their health as only fair or poor between 2001/2002 and 2009/2010. The biggest improvement is in Portugal and the UK. In contrast, the percentage of young people rating their health as only fair or poor increased in Poland, Belgium and Hungary.

Figure 6. Changes in the percentage of young people rating their health as 'fair' or 'poor' between 2001/2002 and 2009/2010



v) Overall subjective well-being. Table 7 shows the results for the overall subjective well-being dimension between 2001/2002 and 2009/2010. The most evident changes are related to Norway (+ 7 positions), followed by France and Portugal (+ 6 positions). In contrast, Greece is the country that lost most positions (- 11) moving from the best to the intermediate group. On the whole the group compositions are relatively stable over the last decade.

Table 7. Changes in subjective well-being in rich nations between 2001/2002 and 2009/2010

	Subjective Well-being RC7	Subjective Well-being RC11	DIFF
Norway	10	3	7
France	17	11	6
Portugal	15	9	6
Spain	7	2	5
United Kingdom	21	16	5
Ireland	11	8	3
Czech Republic	20	18	2
Italy	16	15	1
Belgium	12	12	0
Germany	5	5	0
Netherlands	1	1	0
Denmark	9	10	-1
Sweden	6	7	-1
USA	19	20	-1
Austria	4	6	-2
Switzerland	2	4	-2
Poland	18	21	-3
Canada	13	17	-4
Finland	8	13	-5
Hungary	14	19	-5
Greece	3	14	-11

4. What explains variation in subjective well-being?

In this section we try to analysis not only the relationship between subjective and objective domains, but also how subjective well-being is affected by other factors.

4.1. Relationship between subjective and objective domains

How are the subjective components and the overall subjective well-being domain related to the other more objective domains of well-being? Table 8 summarises the associations. Overall subjective well-being is associated with all the objective domains. Overall well-being (excluding subjective) is associated with all the components of subjective well-being except educational well-being. In fact subjective education is not associated with any of the objective domains including education. Material well-being is associated with all the other subjective components. The health and safety and the housing environment domains are associated with life satisfaction and subjective health but not family relations and education. Behaviour is associated with life satisfaction. The strongest associations between overall subjective well-being and the other domains are with material well-being and housing and the environment.

Table 8: Correlation between the other domains of well-being, overall subjective well-being and the subjective well-being components.

	Overall subjective well-being	Life satisfaction	Family relations	Subjective Education	Subjective Health
Material well-being domain	.677**	.600**	.379*	.167	.458*
Health and safety domain	.542**	.620**	.393*	-.106	.427*
Education domain	.474**	.290	.437*	.201	.239
Behaviour domain	.534**	.447*	.367	.119	.360
Housing and environment domain	.610**	.598**	.277	.012	.504**
Overall (exc subjective)	.666**	.576**	.448*	.139	.429*

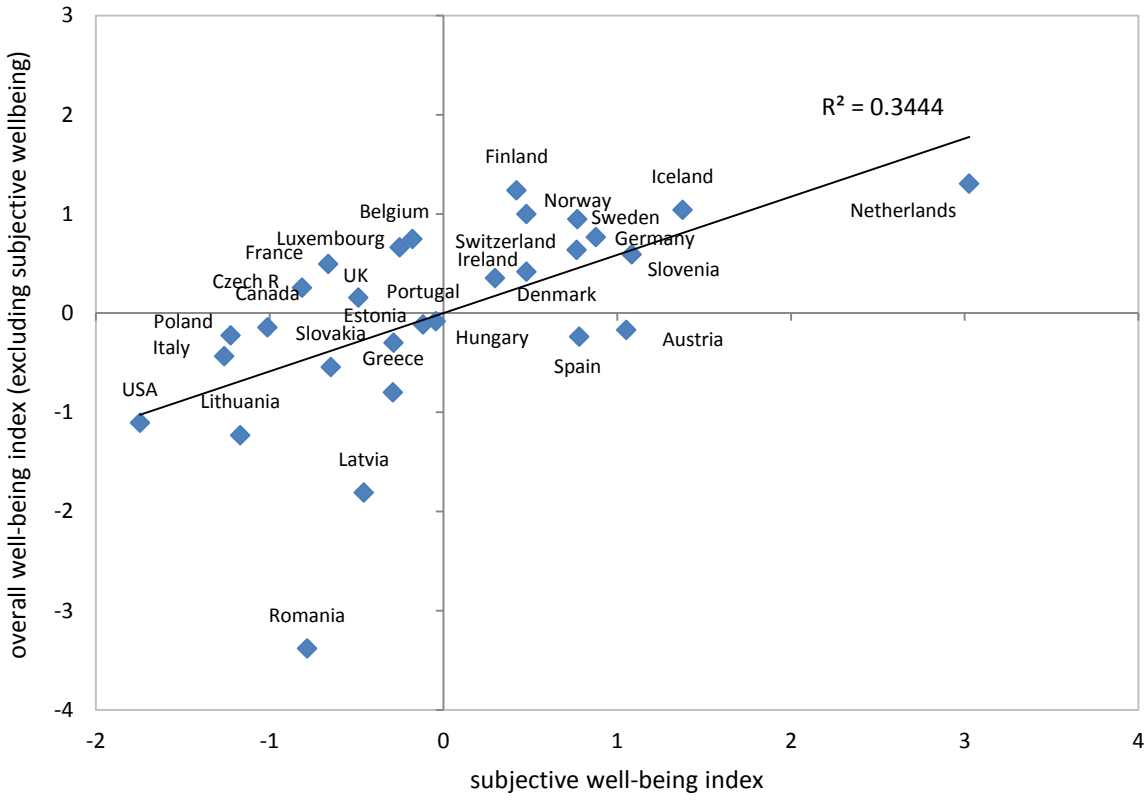
Table 9 compares the rank orders of the child well-being index without subjective well-being and the subjective well-being dimension. The Netherlands is the best performing country on both. Also Norway, Iceland and Sweden are in the top group of countries on both objective and subjective well-being. Poland, Italy, Slovakia, USA, Lithuania and Romania are in the bottom group of countries on both objective and subjective measures. In the other countries the pattern is more mixed. Austria, Slovenia and Spain are the countries which would gain most by having subjective well-being included in an overall well-being measure. In contrast, the Czech Republic, France and Italy are the countries which would lose most from including subjective well-being.

Table 9. Child well-being rank versus subjective well-being

	Child well-being index	Subjective well-being index
Netherlands	2.4	1
Norway	4.6	10
Iceland	5.0	2
Finland	5.4	11
Sweden	6.2	7
Germany	9.0	5
Luxembourg	9.2	16
Switzerland	9.6	8
Belgium	11.2	15
Ireland	11.6	12
Denmark	11.8	9
Slovenia	12.0	3
France	12.8	22
Czech Republic	15.2	24
Portugal	15.6	14
United Kingdom	15.8	20
Canada	16.6	25
Austria	17.0	4
Spain	17.6	6
Hungary	18.4	13
Poland	18.8	27
Italy	19.2	28
Estonia	20.8	17
Slovakia	20.8	21
Greece	23.4	18
USA	24.8	29
Lithuania	25.2	26
Latvia	26.4	19
Romania	28.6	23

Figure 7 shows the association between objective and subjective well-being graphically Romania, Latvia and the Netherlands have higher subjective well-being than you would expect given their overall objective well-being. In contrast the US, Italy, France, Canada, Poland and Luxembourg all have lower subjective well-being than you would expect given their objective well-being.

Figure 7: Association between overall well-being excluding subjective well-being and overall subjective well being



4.2 The relationship between subjective wellbeing and structural factors

Several studies have investigated the different factors contributing to the level and changes in subjective wellbeing. According to Stevenson and Wolfers (2008), there are no differences between the micro and macro levels as *within* country analysis and *between* country analyses lead to the same results. In particular, "estimates of the within- and between-country well-being-income gradient tend to lie in the range of 0.2-0.4" (Stevenson and Wolfers, 2008: 32). Based on a sample of 129 countries, Deaton (2008) confirm the same results finding a correlation close to 0.8 between life satisfaction and log average income. The natural conclusion coming from these analyses is that increasing income could make people happier generating a more satisfied society.

However, there is no general consensus in the macro literature about this point. As reported by Frey and Stutzer (2003), the results are mixed and it is not possible to draw firm conclusions. Some analyses show that the correlation between income and life satisfaction is small while other researchers find it is not significant in rich countries (see Böhnke and Kohler, 2008; Frey and Stutzer 2002). Indeed, the famous "Easterlin paradox" highlights the satisfaction in the society is not strictly related to the variation of the material conditions beyond a certain threshold (Easterlin 1974). One of the explanations is related to the existence of decreasing marginal utility: "concretely, this means that the effect of earning an

additional ten thousand dollars on subjective well-being becomes progressively smaller as one's initial level of income increases" (Clark and Senik, 2011: 14).

Consequently, a growing part of the literature stresses that in rich societies subjective wellbeing is affected by other factors. For example, the level of subjective wellbeing is negatively related to unemployment (Pittau et al., 2010) and also to inflation (Frey and Stutzer, 2003; di Tella et al., 2003). Moreover, a number of works suggest that it is the relative position occupied in the society rather than the level of income per se that counts (Layard, 2005). Empirical evidence confirms that on average high income inequality is associated to low subjective wellbeing (Verme, 2011). However, according Alesina et al. (2004), this result holds for European countries but not for the US. In the latter country, the expectations that one will move up the distribution in the future reduces the negative effect of inequality on life satisfaction.

Beyond economic factors, subjective wellbeing could be affected by institutional and social factors. Inglehart et al. (2008) found a positive correlation between subjective wellbeing and freedom, while Veenhoven (2000) argues that it is economic freedom in particular that generates a positive impact on happiness. Hudson (2006) shows a positive association between satisfaction and the quality of institutions; Dorn et al. (2007) point out that democratization improves subjective wellbeing as people tends to participate more in the society.

Finally, a numbers of work also introduced variables such as religion and language in an attempt to catch cultural differences (Dorn et al., 2007). Notwithstanding the difficulty in finding valid proxies to measure cultural differences, these variables seem to be important factors in explaining the level of subjective wellbeing at least of adults.

4.2.1. Empirical analysis

It is interesting to investigate the relationship between subjective wellbeing and other structural factors. In contrast to the previous studies our analysis considers children subjective wellbeing and tries to regress it on a set of variables considered relevant according to the empirical literature.

The description of the variables is reported in Table 10. First of all, we include the level of income proxied by the GDP per capita. Since our analysis is based on high income countries, we do not expect subjective wellbeing to be affected by the material conditions. As reported in the previous section the level of subjective wellbeing in high income countries is more affected by factors such as inequality and the quality of institutions. To measure the level of inequality we introduce the Gini coefficient. The assumption is that more inequality produces less satisfaction inside the society. To proxy for the quality of institutions we include the government effectiveness index provided by Kaufmann et al. (2010). This index measure the quality of governments in producing public goods and providing services and more generally operating independently and efficiently. We expect good institutions to impact positively on family's satisfaction and therefore on children subjective wellbeing. Moreover, subjective child wellbeing could be affected by government policies toward family conditions. In countries where government is closer to the families and more sensitive to their problems, families' satisfaction will be higher than in other countries. For all these reasons we include the percentage of GDP spent by government on families. We expect that more expenditure will impact positively on subjective wellbeing since children can enjoy more services and so on.

Table 10. Variables description

Variable name	Variable description	Source	year
Subjective wellbeing	Index of children subjective wellbeing	Authors' elaboration	2009 - 2010
GDP per capita	GDP per capita, PPP (constant 2005 international $)	World Development Indicators	2008
Gini	Gini on Income	Eurostat, OECD and national sources	2008 - 2009
Public expenditure on families	Public expenditure on Families (% of GDP)	OECD	2009
Government effectiveness	Quality of institutions	Kaufmann et al. (2010)	2008

Finally, although cultural differences are important in understanding the level of subjective wellbeing, these are difficult to capture. The authors are well aware that the exclusions of such important factors limit the analysis.

In order to analyse the factors affecting children subjective wellbeing, a simple OLS regression is used. Table 11 confirms that the level of income is not a relevant variable in explaining the children subjective wellbeing in advanced economies. Other factors played a more important role as income inequality and the quality of institutions. In particular, Table 5 shows that the Gini coefficient is negative and significant. In other words, this means that high inequality reduces children's subjective wellbeing in the society. Moreover, Table 11 shows that the government effectiveness index is positive and significant. Consequently, the quality of life is positively affected by the quality of institutions.

Table 11. Regression results (dependent variable: children subjective wellbeing)[5]

VARIABLES	1	2	3	4
GDP per capita	0.0221 [0.016]	0.0128 [0.015]	-0.0099 [0.009]	-0.0085 [0.010]
Gini		-0.0980** [0.039]	-0.0764* [0.042]	-0.0967* [0.049]
Government effectiveness			0.7102** [0.302]	0.8354** [0.397]
Public expenditure on families				-0.0475 [0.226]
Constant	-0.6852 [0.442]	2.5068* [1.456]	1.6482 [1.510]	2.1204 [1.710]
Observations	29	29	29	26
R-squared	0.073	0.227	0.317	0.294

[5] Correlation matrix in the annex

5. Conclusion

As highlighted in this paper, subjective well-being represents an important component of the overall well-being. The data show that children in the Netherlands present the highest level of subjective well-being. Between the early and the late 2000s, it is possible to observe that the changes in subjective well-being were small. The countries that recorded the highest variations were Norway, Portugal and the United Kingdom while Austria, Canada and Greece recorded the most important drop.

This work also investigates the relationship between subjective well-being and some structural factors. Our analysis finds that the level of income is not a relevant variable in explaining children subjective well-being in advanced economies. Indeed, the famous "Easterlin paradox" highlights that satisfaction is not related to the variation of material conditions beyond a certain income threshold (Easterlin, 1974). However, other factors play a more important role. In particular, in rich societies people used to value more their relative economic position. Consequently, high inequality negatively impacts on children subjective well-being. In addition, the quality of life is positively correlated to the quality of institutions.

Thus, these results give the possibility to extract useful policy implications suggesting that government could improve family's satisfaction and therefore children subjective well-being promoting redistributive policies, producing public goods and providing services in an independent and efficient way.

Annex Table. Correlation matrix

	Subjective wellbeing	GDP per capita	Gini	Public expenditure on families	Government effectiveness
Subjective wellbeing	1.0000				
GDP per capita	0.3053	1.0000			
Gini	-0.4077**	0.0181	1.0000		
Public expenditure on families	0.2807	0.2479	-0.4128**	1.0000	
Government effectiveness	0.4031**	0.7203***	-0.1491	0.2779	1.0000

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